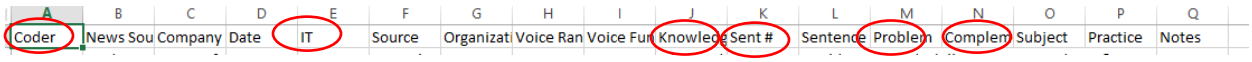
A quick guide on IRR calculator GUI

Version 2.1

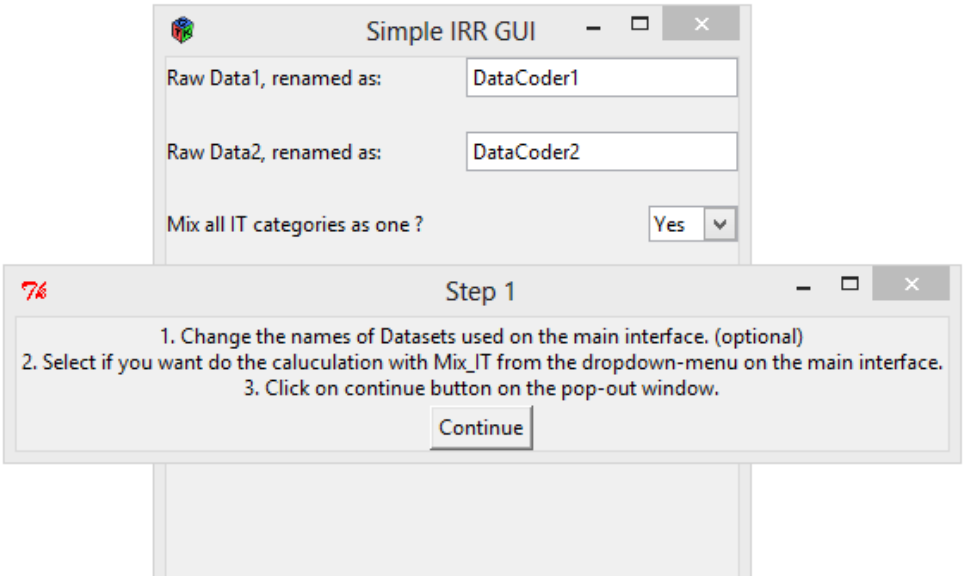
Before you launch the GUI, make sure you have your raw data in appropriate format and structure



- Cohen's Kappa can only deal with interrater reliability between two coders.
- Only data sets in CSV files are acceptable.
- Data sets must have variables containing information of coders, IT category, Knowledge classification, sentence number, complementarity (subclass under what: objective capability) and problem (subclass under what: subjective capability).
- The names of those variables mentioned above should be exactly written as "Coder", "IT", "Knowledge", "Sen#.", "Complementarity" and "Problem".

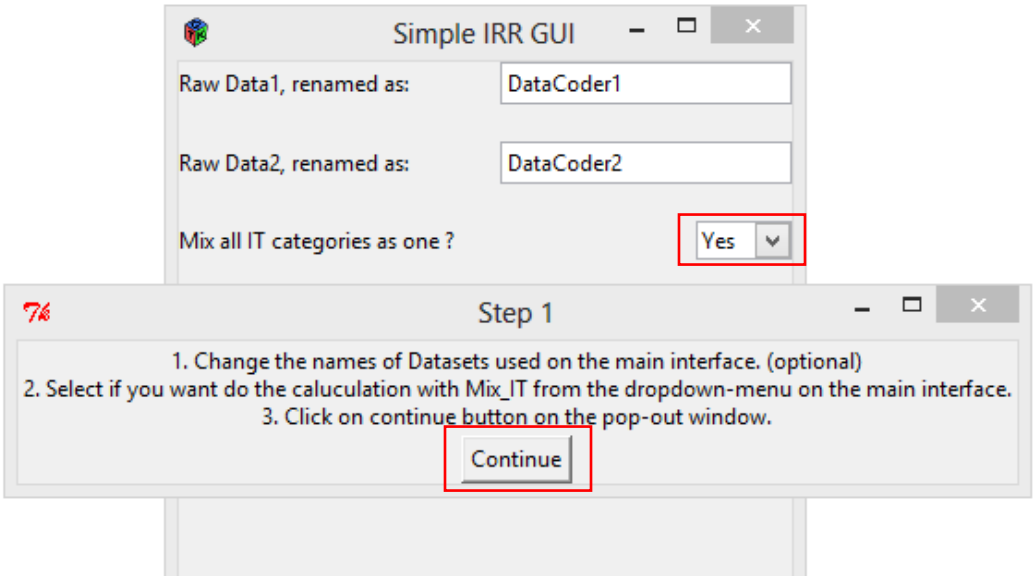
Now, we are ready to launch the GUI, please follow steps mentioned below.

1. Run the script in R and you will see the interface with another pop-out window.

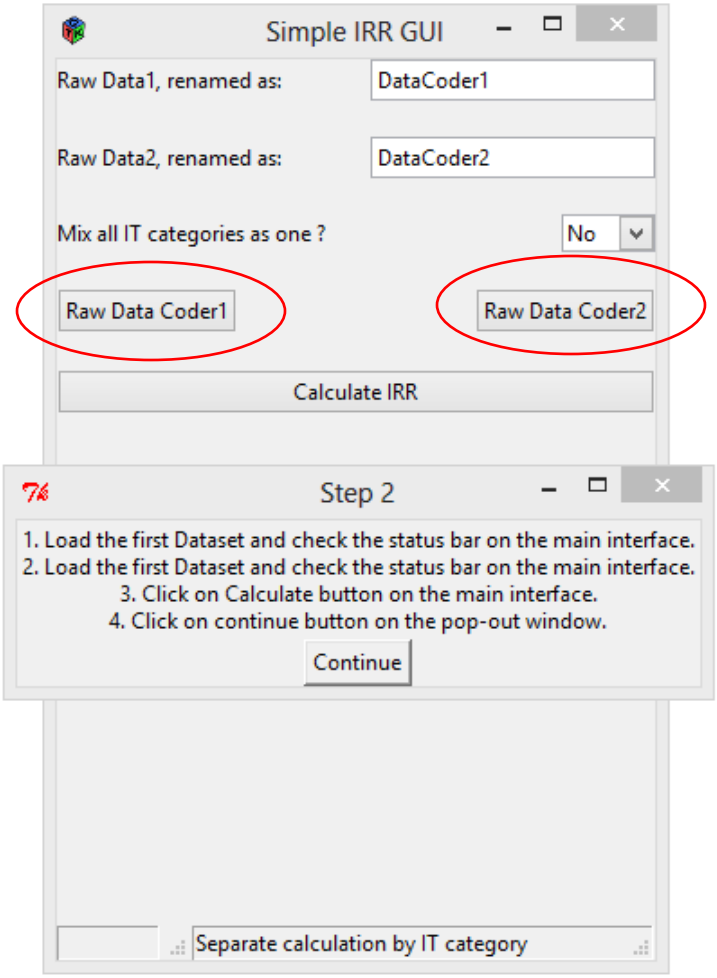


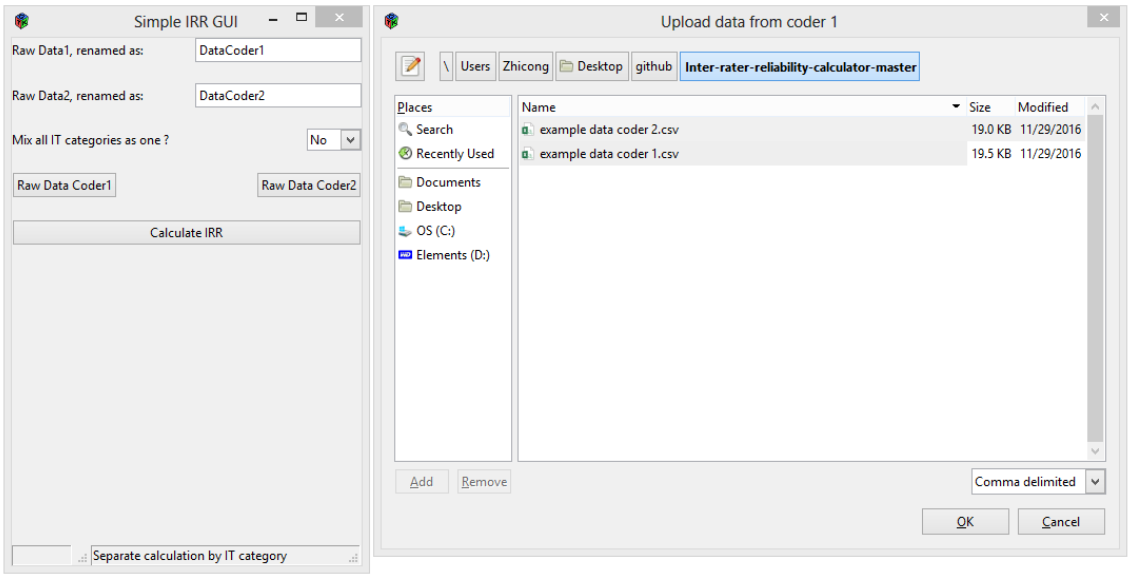
2. Click on the dropdown menu to select MixIT setting (to choose whether or not you are going to do all calculation separately according to different IT levels). You can also change the name of the raw

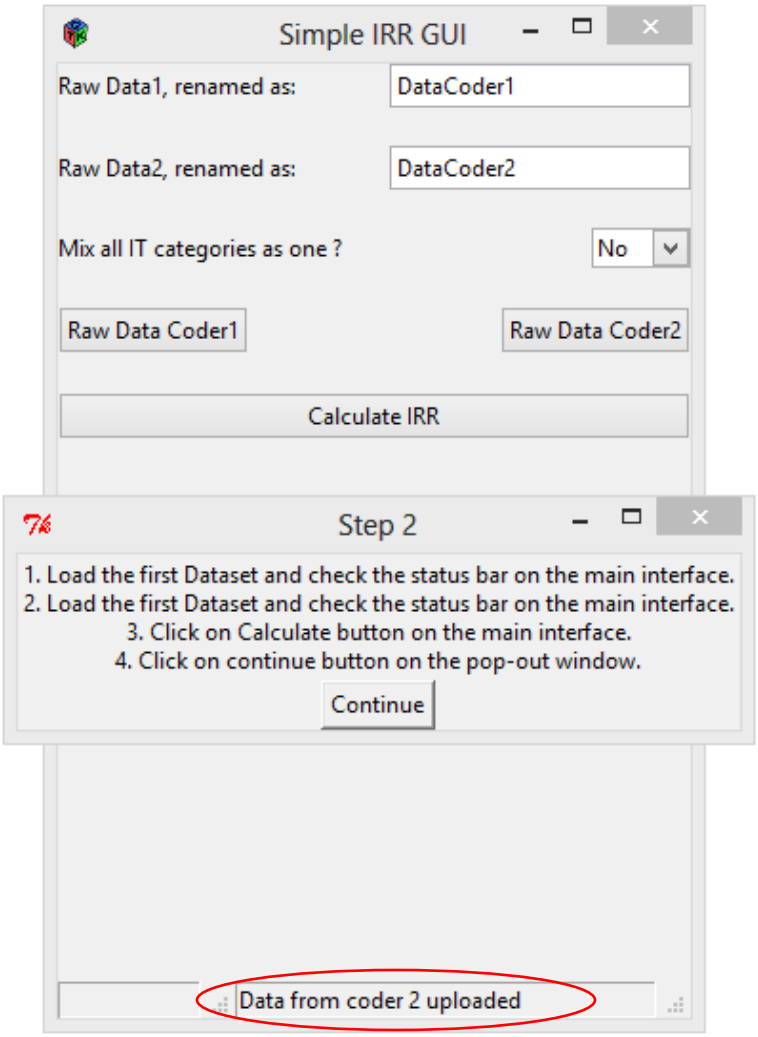
data sets that will be input, but you do not have to. It helps to debug when you try to access the data input and variables from console. After you have finished the procedure mentioned above, click on the “Continue” button on the pop-out window.



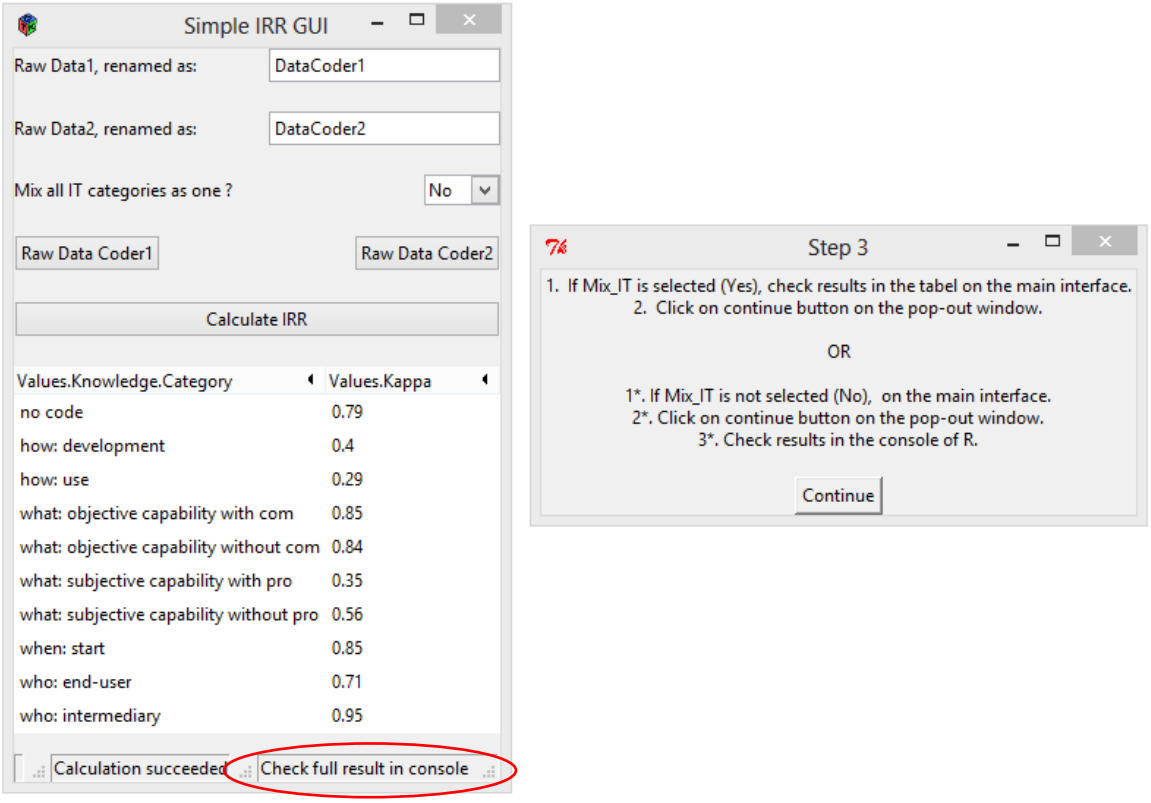
3. Upload raw data files by clicking the circled buttons. It will pop out a file browser. Just find the right directory where you save the data sets and click on “open”. And after both data sets are successfully uploaded, click on “Calculate IRR” button on the interface. After you have finished the procedures mentioned above, click on the “Continue” button on the pop-out window. Keep an eye on the status bar for status updates.


Simple IRR GUI
Raw Data1, renamed as:
DataCoder1
Raw Data2, renamed as:
DataCoder2
Mix all IT categories as one ?
No
Raw Data Coder1
Raw Data Coder2
Calculate IRR
Step 2
1. Load the first Dataset and check the status bar on the main interface.
2. Load the first Dataset and check the status bar on the main interface.
3. Click on Calculate button on the main interface.
4. Click on continue button on the pop-out window.
Continue
Separate calculation by IT category


Simple IRR GUI
Raw Data1, renamed as:
DataCoder1
Raw Data2, renamed as:
DataCoder2
Mix all IT categories as one ?
No
Raw Data Coder1
Raw Data Coder2
Calculate IRR
Separate calculation by IT category
Upload data from coder 1
Users
Zhicong
Desktop
github
Inter-rater-reliability-calculator-master
Places
Search
Recently Used
Documents
Desktop
OS (C:)
Elements (D:)
Name
Size
Modified
example data coder 2.csv
19.0 KB
11/29/2016
example data coder 1.csv
19.5 KB
11/29/2016
Add
Remove
Comma delimited
OK
Cancel



4. Check result in the table. And check status bar to see if you need check the console for the full result. After you have finished the procedure mentioned above, click on the “Continue” button on the pop-out window.



5. Check full result in the console of R if the text “Check full result in console” is displayed on the status bar in the previous step.

```
> myOutput
$IT_level
[1] "BD"  "IoT" "SM"

$Inter_k_IT
$Inter_k_IT[[1]]
                       Knowledge Category Kappa
1                                 no code  0.79
2                           how: development  0.40
3                                 how: use  0.29
4      what: objective capability with com  0.85
5   what: objective capability without com  0.84
6     what: subjective capability with pro  0.35
7  what: subjective capability without pro  0.56
8                               when: start  0.85
9                             who: end-user  0.71
10                         who: intermediary  0.95

$Inter_k_IT[[2]]
                       Knowledge Category Kappa
1                           how: development  0.00
2                                 how: use  0.00
3      what: objective capability with com  0.46
4   what: objective capability without com  0.65
5     what: subjective capability with pro  1.00
6  what: subjective capability without pro  0.84
7                               when: start  0.84
8                             where: global  1.00
```